L7 ANSWER 2 OF 5 MEDLINE DUPLICATE 2

ACCESSION NUMBER: 1999434114 MEDLINE
DOCUMENT NUMBER: 99434114 PubMed ID: 10502726
TITLE: Up-regulation of ephrin-A1 during melanoma progression.
AUTHOR: Easty D J; Hill S P; Hsu M Y; Fallowfield M E; Florenes V A; Herlyn M; Bennett D C
CORPORATE SOURCE: St. George's Hospital Medical School, London, UK.. david.easty@ucd.ie
CONTRACT NUMBER: CA 25874 (NCI)
SOURCE: INTERNATIONAL JOURNAL OF CANCER, **(1999 Oct 22)** 84 (5) 494-501.
Journal code: 0042124. ISSN: 0020-7136.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199910
ENTRY DATE: Entered STN: 19991101
Last Updated on STN: 19991101
Entered Medline: 19991021

AB Ephrin-A1, formerly called B61, is a new melanoma growth factor; it is angiogenic and chemoattractant for endothelial cells. EPH-A2, or ECK (a receptor for ephrin-A1), is ectopically expressed in most melanoma cell lines; the pathology where this expression is first manifested and the possible role of the receptor in tumor progression are unknown. To determine these, we studied the expression of this ligand and receptor in biopsies of benign and malignant melanocytic lesions. EPH-A2 was not detected in normal melanocytes, benign compound nevi or advanced melanomas, though it was found in 2 of 9 biopsies of malignant melanoma in situ. Ephrin-A1 was present in occasional early lesions and in advanced primary melanomas (43%) and **metastatic** melanomas (67%). Expression of ephrin-A1 was induced in melanoma cells by pro-inflammatory cytokines. Our findings are consistent with 2 possible roles for ephrin-A1 in melanoma development: it may promote melanocytic cell growth or survival and induce vascularization in advanced melanomas. Both effects may be potentiated by inflammatory responses. Our data are consistent with earlier observations that an inflammatory infiltrate is associated with poor prognosis in thin primary melanomas.

L7 ANSWER 4 OF 5 MEDLINE DUPLICATE 3
ACCESSION NUMBER: 2000013158 MEDLINE
DOCUMENT NUMBER: 20013158 PubMed ID: 10544301
TITLE: Overexpression of the **EphA2** tyrosine kinase in prostate cancer.
AUTHOR: Walker-Daniels J; Coffman K; Azimi M; Rhim J S; Bostwick D G; Snyder P; Kerns B J; Waters D J; Kinch M S
CORPORATE SOURCE: Department of Basic Medical Sciences, Purdue University, West Lafayette, Indiana 47907-1246, USA.
SOURCE: PROSTATE, **(1999 Dec 1)** 41 (4) 275-80.
Journal code: 8101368. ISSN: 0270-4137.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199912
ENTRY DATE: Entered STN: 20000113
Last Updated on STN: 20000113
Entered Medline: 19991222

AB BACKGROUND: Molecules that are highly expressed by human prostate cancers may serve as therapeutically relevant targets or tumor markers. Tyrosine kinases are frequently overexpressed in **metastatic** tumor cells and this prompted us to screen for tyrosine kinases that are overexpressed in prostate cancer cells. METHODS: Expression levels of the **EphA2** receptor tyrosine kinase were determined by Western blot analysis in canine and human prostate cancer cell lines and in immortalized and transformed variants of 267B1 prostatic epithelial cells. **EphA2** levels in benign human prostate and prostate cancers were also determined in formalin-fixed, paraffin-embedded tissues using immunohistochemical staining. RESULTS: **Metastatic** prostate cancer cells overexpressed **EphA2** by 10-100 fold as compared with non-invasive prostatic epithelial cells. **EphA2** immunoreactivity in vivo was also significantly greater in human prostate cancers as compared with benign prostate epithelium. CONCLUSIONS: The **EphA2** receptor tyrosine kinase is differentially expressed in human and canine prostate cancer cell lines and overexpressed in human prostate cancers as compared with benign prostate tissues. **Metastasis**-derived canine prostate carcinoma cell lines overexpress **EphA2** and may provide pre-clinical models to further evaluate the role of **EphA2** in prostate carcinogenesis. Further investigations are needed to determine the utility of **EphA2** as a tumor marker and a novel target in human prostate cancer.